Intelligent assistance systems for minimally invasive procedures

- Surgery
- Urology
- Gynaecology

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AKTORmed – This is who we are

Aktormed robotic surgery is a new concept in medical device engineering of systems used in the operating theatre.

We have a wealth of experience in the development of patient positioning, robotics, sensor and actuator devices. Our objective is to develop, manufacture and distribute mechatronic assistance systems for minimally-invasive interventions.

Our assistance systems are not designed to replace the surgeon, rather they are there to assist him/her with and facilitate the challenging task in question.

SOLOASSIST –
Robotic camera control
Surgery and technology in harmony

For a wide variety of surgical interventions laparoscopic techniques have become established as standard procedure. Perfect imaging is the basis for safe and effective surgery. Stable support and flexible positioning of the endoscope are of paramount importance. This is where the SOLOASSIST is ideal, relieving your team’s workload.

This is what users have to say:

Prof. Dr. Hubertus Feussner

"I am convinced that surgical assistance systems have a future in the operating theatre. Surgeons are regaining control of their field of vision for the very first time, thanks to assistance systems. This is something that has hitherto been lacking in the field of laparoscopy so far."

Prof. Dr. Alois Fürst

"In my experience the SOLOASSIST system provides a completely steady and shake-free image. Although I am practically performing the surgery alone, the system has made operating even easier and safer."

PD Dr. Dieter Birk

"We have performed more than 1000 procedures with SOLOASSIST. From our point of view, SOLOASSIST can be used in the upper and lower abdomen, but it can also be used very efficiently in more challenging procedures such as in bariatric surgery."

Visceral surgery:
- Cholecystectomy
- Appendectomy
- Gastroenterological procedures
- Fundoplicatio
- Gastric Banding

Urology:
- Nephrectomy
- Vasectomy
- Adrenalectomy
- Prostatectomy

Gynaecology:
- Tubal Ligation
- Hysterectomy
- Cystectomy
- Ovarectomy

This list of possible procedures is not exhaustive

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SOLOASSIST – Robotic camera control

The assistance system for MIS procedures

- Full functionality for visceral surgery, urology and gynaecology.
- A stable and shake-free image enhances the quality of surgery.
- Assistants can focus their full attention on the operating procedure and thus actively support the surgeon.

Stable OP field of vision

- The system provides surgeons with a stable and rock-steady OP field of vision, even in extreme endoscopic positions.
- The wide scope of movement allows surgeons full visibility of the operating sites - without any restrictions. There is no need to alter your customary way of working.

Safe and sterile working

- A stable image allows surgeons to work in a more relaxed manner, maintaining a reliable view of essentials.
- Even extreme camera positions can be maintained for as long as required which is a clear advantage over manual camera control.
- Joystick, joint and camera support are autoclavable. The device as such is covered by a sterile single-use drape.

Surgery | Urology | Gynaecology
Precise robotic control

- With minimally invasive procedures, surgeons work with both hands. As a consequence, the SOLOASSIST is controlled by a joystick positioned on the instrument.
- The ergonomic joystick can be adapted to fit almost all commercially available handpieces by using a clamp mount.
- The functional design of the joystick makes it easy to handle and the keypad ensures safety of surgery.

Dynamic manual positioning

- At the push of a button, the arm becomes moveable and can then be pulled into the desired position. When the button is released it locks immediately, remaining in the set position.
- The release button is located on the distal end of the arm in an easily accessible position.
SOLOASSIST – Robotic camera control

Benefits for the surgeon

- **Precise endoscope positioning within a unique range of movement**
  You determine the image yourself; there are no misunderstandings. Positioning is precise and sensitive. There is no need to alter the way you work, thanks to the unique range of movement.

- **Simple and intuitive operation with a joystick, an additional manual control or optional wireless joystick.**
  The human hand is our most accurate and precise tool. Manual work is performed intuitively and without any mental interference. This is why you guide the SOLOASSIST with an ergonomic joystick – simply easy!

- **Stable positioning of the endoscope to obtain a steady image**
  Thanks to its carbon structure, the SOLOASSIST is stable and does not vibrate. It does not shake or tilt the horizon - a relaxing and fatigue-free way to work.

- **Unhindered access to the OP sites, no bothersome components impeding the trocar area**
  The SOLOASSIST supports the endoscope from above, leaving ample room for your instruments; there is no need to alter the way you normally work.

- **Simple handling, can be set up and is ready for use in just a few minutes**
  Quick and easy set-up and disassembly. The SOLOASSIST is attached directly to the operating table and covered with a sterile drape while the patient is being prepared for surgery.

- **Reusable**
  Thanks to the flexible concept of autoclavable components, the SOLOASSIST is ready for the next surgical intervention immediately after completion of the last one – no waiting times.

Advantages for the clinic

- **Relieving pressure on valuable employees**
  For an assistant, static holding of an endoscope is tiresome work. This task is now dealt with by our devices, thus freeing up the assistant who can then focus on more exacting tasks.

- **Better scheduling efficiency**
  The SOLOASSIST is always available to provide assistance, in the evening, at night and at weekends.

- **SOLOASSIST - image boost for your clinic**
  Those running a clinic are increasingly faced with competition for patients and qualified personnel from other clinics and hospitals. In addition to medical competence, a modern and positive image is one of the most important competitive advantages. Document your leadership in terms of innovation by implementing robotic surgery using the SOLOASSIST.

- **Compatible**
  The SOLOASSIST is compatible with all commercially available operating tables and endoscopes, thus protecting your investments. Set-up and disassembly of the system can be performed in conjunction with your usual preparation procedures and do not add to operating time.

- **Cost-effective**
  The SOLOASSIST is completely maintenance free. Expenditure for disposable drapes is negligible.

- **SOLOASSIST – an asset, also for training**
  Being relieved of the tiresome task of having to guide the endoscope, an assistant physician has more time to follow his or her instructors’ explanations more attentively and is thus able to be integrated as an equal and valued team member in a shorter period of time.

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Put us to the test. We would welcome the opportunity to visit you and provide you with a device for a free and non-binding trial.
# Product information

## SURGICAL ASSISTANCE SYSTEMS

### Selected components and accessories

<table>
<thead>
<tr>
<th>Designation</th>
<th>Article number</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOLOASSIST2</td>
<td>141364</td>
</tr>
<tr>
<td>Power Supply with connection cable</td>
<td>131121</td>
</tr>
<tr>
<td>Joint, autoclavable</td>
<td>141362</td>
</tr>
<tr>
<td>Camera support, autoclavable</td>
<td>141363</td>
</tr>
<tr>
<td>Sleeve Ø5, autoclavable</td>
<td>141365</td>
</tr>
<tr>
<td>Sleeve Ø10, autoclavable</td>
<td>141339</td>
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<tr>
<td>Sieve tray</td>
<td>141357</td>
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<tr>
<td>Sterile drape, 50 ea.</td>
<td>141185</td>
</tr>
<tr>
<td>Transport trolley</td>
<td>120874</td>
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</tbody>
</table>
## Technical data

**Work space / dimensions:**

![Diagram of work space and dimensions]

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>9.5 kg</td>
</tr>
<tr>
<td>Compatibility</td>
<td>All commercially available endoscopy optics are adaptable</td>
</tr>
<tr>
<td>Approval</td>
<td>CE / Class I</td>
</tr>
<tr>
<td>Save working load</td>
<td>1 kg</td>
</tr>
<tr>
<td>Supply voltage</td>
<td>100 - 240 Volt, 47 - 63 Hz</td>
</tr>
</tbody>
</table>

![QR Code]

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